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## AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (Previously presented) A method of inducing formation of regenerable embryogenic cotton callus tissue comprising: obtaining a non-embryogenic cotton callus tissue from a hypocotyl, transforming the non-embryogenic cotton callus tissue with an exogenous nucleic acid sequence, culturing the transformed non-embryogenic cotton callus tissue in a medium under dark lighting conditions of 0 μEinsteins m<sup>-2</sup>sec<sup>-1</sup>, and obtaining regenerable embryogenic callus tissue therefrom.

## 2-19. (Canceled)

- 20. (Currently amended) A method of culturing transformed regenerable non-embryogenic cotton callus tissue comprising culturing said cotton callus tissue in a medium containing an antioxidant and an ethylene inhibitor under dark lighting conditions of 0 μEinsteins m<sup>2</sup> sec<sup>2</sup> to induce a regenerable embryogenic eallicallus.
- (Original) The method of claim 20, wherein the ethylene inhibitor is aminoethoxyvinylglycine.
- (Original) The method of claim 20, wherein: the antioxidant is ascorbic acid; and the ethylene inhibitor is aminoethoxyvinylglycine.

## 23-26. (Canceled)

 (Original) The method of claim 20, wherein the regenerable non-embryogenic cotton callus tissue is derived from callus, hypocotyl, cotyledon, root, petiole, anther, or leaf.

## 28-30. (Canceled)

31. (Previously presented) A method of culturing transgenic cotton embryos comprising: culturing transformed regenerable non-embryogenic cotton callus tissue in a medium containing an antioxidant and an ethylene inhibitor under dark lighting conditions of 0 μEinsteins m<sup>-2</sup>sec<sup>-1</sup> to produce transgenic embryogenic cotton tissue; and culturing the